AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims **1-9.** **(Canceled)**

10. **(Currently amended)** In an injector for fuel injection systems of internal combustion engines, ~~in particular direct-injection diesel engines,~~ the injector having fuel, which is to be injected into the engine to be used as the engine's fuel, said fuel being supplied at an injection pressure, and a piezoelectric actuator located in an injector body and held in contact with the injector body on one side via a first spring and a sleevelike booster piston, the sleevelike booster piston having an inner chamber, a nozzle body which is joined to the injector body and having at least one nozzle outlet opening, a stepped nozzle needle guided axially displaceably in the nozzle body, the stepped nozzle needle having a back side which is spaced away from the at least one outlet opening, second spring means disposed inside the booster piston, which second spring means engages the back side of the nozzle needle, and, together with the injection pressure acting on the back side of the nozzle needle, keeps the nozzle needle in the closing position, and a control chamber embodied on the end of the booster piston which is toward the nozzle needle and which control chamber communicates, via at least one leakage gap, with said fuel that is supplied at injection pressure, the nozzle needle being urged in the opening direction by said fuel located in the control chamber, the improvement wherein the booster piston actuated by the

piezoelectric actuator is spatially associated directly with the nozzle needle, in such a way that the nozzle needle is fitted, with a rear region that has a larger diameter than a region of the nozzle needle toward the nozzle outlet, into the inner chamber of the booster piston, wherein the piezoelectric actuator is centered in an axial cylindrical recess of the injector body in such a way that an annular chamber is created between the outer wall of the piezoelectric actuator and the inner wall of the cylindrical recess of the injector body, and wherein the annular chamber communicates hydraulically directly with said fuel which is supplied at injection pressure, wherein the annular chamber also extends into the region of the booster piston axially adjoining the piezoelectric actuator, and wherein the inner chamber of the booster piston communicates hydraulically with the annular chamber and thus with said fuel, and also wherein the booster piston is guided in the nozzle body, forming a leakage gap, in such a way that a hydraulic communication is created between the annular chamber that is at injection pressure and the control chamber.

11. **(Previously presented)** The injector according to claim 10, wherein the nozzle body adjoins the injector body on a face end and wherein the piezoelectric actuator extends through the injector body substantially as far as the face end.

12-15. **(Canceled)**

16. **(Previously presented)** The injector according to claim 10, wherein the first spring comprises a compression spring concentrically surrounding the booster piston and located in the region of the annular chamber associated with the booster piston, the first spring being braced, toward the piezoelectric actuator, on a collar of the booster piston and, toward the nozzle outlet, on a rear end face of the nozzle body, in such a way that the piezoelectric actuator and the booster piston are kept in contact with one another by nonpositive engagement.

17. **(Previously presented)** The injector according to claim 11, wherein the first spring comprises a compression spring concentrically surrounding the booster piston and located in the region of the annular chamber associated with the booster piston, the first spring being braced, toward the piezoelectric actuator, on a collar of the booster piston and, toward the nozzle outlet, on a rear end face of the nozzle body, in such a way that the piezoelectric actuator and the booster piston are kept in contact with one another by nonpositive engagement.

18. **(Previously presented)** The injector according to claim 10, wherein the nozzle needle is guided in the inner chamber of the booster piston, forming a cylindrical leakage gap, in such a way that a hydraulic communication is created between the inner chamber of the booster piston, which is at injection pressure and the control chamber.

19. **(Previously presented)** The injector according to claim 11, wherein the nozzle needle is guided in the inner chamber of the booster piston, forming a cylindrical leakage gap, in such a

way that a hydraulic communication is created between the inner chamber of the booster piston, which is at injection pressure and the control chamber.

20. **(Previously presented)** The injector according to claim 16, wherein the nozzle needle is guided in the inner chamber of the booster piston, forming a cylindrical leakage gap, in such a way that a hydraulic communication is created between the inner chamber of the booster piston, which is at injection pressure and the control chamber.

21-23. **(Canceled)**

24. **(Previously presented)** The injector according to claim 10, further comprising a cylindrical pressure chamber in the region of the nozzle body toward the nozzle outlet and surrounding the nozzle needle, the cylindrical pressure chamber communicating hydraulically with said fuel supply that is at injection pressure, and a axial recess in the nozzle body, to the rear of the cylindrical pressure chamber, in which recess the nozzle needle is guided, forming a further leakage gap, in such a way that a hydraulic communication is created between the cylindrical pressure chamber that is at injection pressure and the control chamber.

25. **(Previously presented)** The injector according to claim 11, further comprising a cylindrical pressure chamber in the region of the nozzle body toward the nozzle outlet and surrounding the nozzle needle, the cylindrical pressure chamber communicating hydraulically with said fuel

supply that is at injection pressure, and a axial recess in the nozzle body, to the rear of the cylindrical pressure chamber, in which recess the nozzle needle is guided, forming a further leakage gap, in such a way that a hydraulic communication is created between the cylindrical pressure chamber that is at injection pressure and the control chamber.

26. **(Previously presented)** The injector according to claim 16, further comprising a cylindrical pressure chamber in the region of the nozzle body toward the nozzle outlet and surrounding the nozzle needle, the cylindrical pressure chamber communicating hydraulically with said fuel supply that is at injection pressure, and a axial recess in the nozzle body, to the rear of the cylindrical pressure chamber, in which recess the nozzle needle is guided, forming a further leakage gap, in such a way that a hydraulic communication is created between the cylindrical pressure chamber that is at injection pressure and the control chamber.

27. **(Previously presented)** The injector according to claim 10, further comprising a union nut securing the nozzle body to the injector body and forming a cylindrical gap between the outer wall of the nozzle body and the inner wall of the union nut, the cylindrical gap communicating hydraulically, via recesses machined into the nozzle body, on one side with the annular chamber and on the other side with the cylindrical pressure chamber.

28. **(Previously presented)** The injector according to claim 11, further comprising a union nut securing the nozzle body to the injector body and forming a cylindrical gap between the outer

wall of the nozzle body and the inner wall of the union nut, the cylindrical gap communicating hydraulically, via recesses machined into the nozzle body, on one side with the annular chamber and on the other side with the cylindrical pressure chamber.

29. **(Previously presented)** The injector according to claim 12, further comprising a union nut securing the nozzle body to the injector body and forming a cylindrical gap between the outer wall of the nozzle body and the inner wall of the union nut, the cylindrical gap communicating hydraulically, via recesses machined into the nozzle body, on one side with the annular chamber and on the other side with the cylindrical pressure chamber.